



AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for providing an expected arrival time of bus stops for a traffic information system, wherein the traffic information system includes an on-board device, a plurality of roadside base stations and a bus information server, the method comprising the steps of:

~~a) collecting traffic information including an on-board device ID, a roadside base station ID and a pass time from the roadside base station;~~

a) at one of the roadside base stations which are installed at side of roadway between the bus stops, receiving an on-board device ID from the on-board device in a bus, when the bus equipping the on-board device passes the roadside base station without stopping;

b) at the roadside base station, transmitting traffic information including the on-board device ID, a roadside base station ID and a pass time to the bus information server;

c) at the bus information server, computing a traffic speed of each section between the roadside base stations using the traffic information;

~~b)d) at the bus information server, computing an average traffic speed of each section between the roadside base stations using the computed traffic speed of each section; based on the collected traffic information and computing time required for arriving to each bus stop from a roadside base station based on the computed average traffic speed of each section; and~~

e) at the bus information server, computing time required for arriving at next bus stops from the roadside base station based on the computed average traffic speed of each section;

~~e)f) at the bus information server, transmitting the computed time required for arriving to at each of the next bus stops from the corresponding roadside base station in order to expected arrival time of each bus station and time required for arriving at each bus stop through a display device to passengers of a bus by using the roadside base station and on-board device.~~

g) at the roadside base station, transmitting the computed time required for arriving at each of the next bus stops to the on-board device when the roadside base station receives the on-board device ID; and

h) at the on-board device, announcing the expected arrival time of each of the next bus stops based on the computed time required for arriving through an output device.

2-3. (Canceled)

4. (Currently Amended) The method as recited in the claim 3~~1~~, wherein the bus information server, the roadside base station and the on-board device determine a bus course based on an on-board device group ID.

5. (Currently Amended) The method as recited in the claim 3~~1~~, wherein the bus stops ~~is~~are a major bus stops.

6-10. (Canceled)

11. (New) The method as recited in claim 1, wherein in the step c), the bus information server stores the computed traffic speed of each section to a section speed_DB.

12. (New) The method as recited in claim 11, wherein in the step d), the bus information server updates the average traffic speed of each section based on the computed traffic speed of each section previously stored in the section speed_DB.

13. (New) The method as recited in claim 12, wherein the step e) includes the steps of:

- e1) reading a bus stop_DB stored in the bus information server as a form of a table containing a bus stop list according to bus courses passing the roadside base station;
- e2) computing the time required for arriving at each of the bus stops based on the table of the bus stop_DB; and
- e3) storing the computed time for arriving at each of the bus stops in a requirement time_DB as a form of a table.

14. (New) The method as recited in claim 13, wherein in the step f), the bus information server transmits the table of the requirement time_DB and an on-board device group ID to the corresponding roadside base station.